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The Problem of Flotation in Decontamination  
of Radioactive Effluents S/089/60/009/003/016/016/XX  
B006/B063

proved to be an optimum in previous tests. Each experiment was performed three or four times at 17-19°C. They were intended to determine the coefficient of flotation  $K_{fl}$  (measure for the reduction of the deposit volume). Results are diagrammatically shown. First, the optimum amount of the flotation reagent per gram of floating iron hydroxide deposit was determined (amount of deposit: 7 g/l; solution: pH=8.5). Fig. 1 shows  $K_{fl}$  as a function of the amount of the flotation reagent. The optimum amount is 1 g per 1 g of  $\text{Fe(OH)}_3$ . Further additions did not increase  $K_{fl}$ . The pH of the solution has a considerable effect on  $K_{fl}$ . Fig. 2 shows the effect of the amount of NaOH upon  $K_{fl}$ . The peak value of  $K_{fl}$  (~8.0) is reached in a neutral medium. At 300 mg/l and more,  $K_{fl} \approx 3.8$  and is independent of the pH. Fig. 3 shows  $K_{fl}$  as a function of the concentration of iron hydroxide in the suspension.  $K_{fl}$  first drops with an increase of concentration and remains constant at about 8 g/l. Furthermore, the authors studied the effect of aging of the iron hydroxide deposit upon

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The Problem of Flotation in Decontamination  
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flotation (Table 2). This table indicates that the time of flotation required for 2000 r.p.m. increases with the age of the deposit. The authors also studied the effect of various anions and cations, particularly

$\text{Ca}^{2+}$  and  $\text{CO}_3^{2-}$ , upon the froth stability. The results of the respective experiments are illustrated in Figs. 4 and 5. Table 3 lists the values of activity in the solutions in per cent:

Isotope	Initial solution	Solution after coagulation	Solution after flotation
Ru <sup>106</sup> -Rh <sup>106</sup>	100	37.60	-1.27
Pm <sup>147</sup>	100	0.40	-0.03
Sr <sup>90</sup>	100	6.50	+0.02
Zr <sup>95</sup> -Nb <sup>95</sup>	100	1.10	+0.01

The negative sign indicates that during flotation part of radioactivity passed over from the deposit into the solution, while the positive sign indicates the reverse process. The results are finally discussed in

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The Problem of Flotation in Decontamination  
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detail. As there is no significant desorption of radioisotopes during flotation, the authors' method appears to be very encouraging. The flotation reagents had been made available by V. G. Plyusnin of the Institut khimii UFANa (Institute of Chemistry of UFAN). There are 5 figures, 3 tables, and 11 references: 5 Soviet and 5 US.

SUBMITTED: March 26, 1959

Card 4/4

BESSER, M.R., inzh.; BASKOV, L.V., inzh.

Depth and characteristics of changes in the structure of hardened  
alloyed steel caused by grinding. Vest.mashinostr. 43 no.9:67-69  
S '63.  
(MIRA 16:10)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

HED'KO, S.G., doktor tekhn. nauk; BASKOV, L.V.

Increasing the durability of parts by mechanical surface  
hardening. Mashinostroitel' no.11:28-29 N '64 (MIRA 18:2)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

USSR/Soil Science. Tillage. Melioration. Erosion

Abs Jour : Ref Zhur - Biol., No 10, 1958, No, 43877

J-5

Author : Baskov S.

Inst : Not Given

Title : Results of the Application of T.S. Mal'tsev's Methods in  
Kurganskaya Oblast'

Orig Pub : S. kh. Sibiri, 1957, No 8, 20-22

Abstract : No abstract

Card : 1/1

New data on spectroscopic analysis ...

S/048/63/027/001/001/043  
B163/B180

simultaneously instead of the usual method which requires separate determination of Si in an arc discharge. The spectrum of a specimen sampled by electric discharge can usually be recorded without heating the transfer products, but the intensity ratios may vary with time. Sampling by electric spark treatment can be further improved by using single discharge pulses, which helps to keep the composition of the transfer products constant and exclude the effect of other components. The circuit diagram is given, for an electric spark sampler without vibrational mechanism, in which the sampling electrode moves along the surface, and the discharge is initiated by a periodically discharging capacitor in a spark circuit. This paper was presented at the 14th Conference on Spectroscopy in Gor'kiy, July 5-12, 1961. There are 3 figures.

Card 2/2

BASKOV, V.S.; KOROLEV, Yu.P.

Quantitative spectrum analysis of the German silver alloy MN-70-30  
using contact-spark sampling. Zhur. prikl. spektr. 3 no.5:458-460  
N '65. (MIRA 18:11)

ACCESSION NR: AT4042327

S/000/64/000/000/0073/0076

AUTHOR: Palladin, M. N., Baskov, V. S., Koroleva, A. I.

TITLE: The use of preliminary electric spark transfer in spectral analysis

SOURCE: AN SSSR, Karel'skiy filial. Fizika poluprovodnikov i metallov (Physics of semiconductors and metals). Moscow, Izd-vo Nauka, 1964, 73-76

TOPIC TAGS: spectral analysis, spectroscopy, quantitative analysis, lead, iron, silicon, electric spark transfer, thyratron

ABSTRACT: Transfer of matter from oneelectrode to another via an electric spark has been known for a long time and is currently used for some practical purposes. In the present paper, improved technique for its application in spectral analysis is proposed. The new technique, using a sample collector developed by the authors, offers better control of the magnitude, stability and duration of the electrical discharge by the authors, offers better control of the vibrator. The new sample collector differs from that currently in use in that, in place of a vibrator, a thyratron controls the capacitor discharge. The capacitor is fed from a BSA-4 rectifier by way of a potentiometer which serves as a restricting resistance. Two electrodes are included in the thyratron anode circuit, one of which (the anode) is the

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ACCESSION NR: AT4042327

sample and the other — the sample collector. The sample fraction picked up by the collector is then subjected to spectral analysis. The spectroscopic results obtained for Pb, Fe and Si by the procedure are described by the authors as satisfactory. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Karel'sky filial AN SSSR (Karelian Branch, AN SSSR)

SUBMITTED: 08Jan64

ENCL: 00

SUB CODE: OP, NP

NO REF SOV: 005

OTHER: 000

2/2  
Card

BASKOV, V.S.; PALLADIN, M.N.

Quantitative spectral analysis of heat resistant steel by means of contact electric spark sampling. Zav.lab. 30 no.12:1464-1465 '64.

1. Petrozavodskiy gosudarstvennyy universitet.  
(MIRA 18:1)

BÈGER, Solomon Izrailevich; BASKOV, Vilor Sil'vestrovich; TYUMENEVA,  
S.T., inzh., red.; GRIGOR'IEVA, I.S., red.izd-va; GVIRTS, V.L.,  
tekhn. red.

[Quantitative spectrum analysis of titanium-base alloys using the  
method of electric spark contact sampling] Kolichestvennyi spekt-  
ral'nyi analiz splavov na osnove titana s primeneniem metoda kon-  
taktno-elektroiskrovogo otbora proby. Leningrad, 1962. 17 p.  
(Leningradskii dom nauchno-tehnicheskoi propagandy. Obmen peredovym  
opytom. Seriya: Kontrol' kachestva produktsii, no.5) (MIRA 15:6)  
(Titanium alloys—Spectra) (Electric spark)

BASKOV, V.S.; PALLADIN, M.N.

Vibration-free sampler. Zav. lab. 30 no. 6:761-762 '64  
(MIRA 17:8)

1. Petrozavodskiy gosudarstvennyy universitet.

BASKOV, Ye. A.: Master Geolog-Mineralo Sci (diss) -- "The underground waters of the southern portion of the Yakutsk artesian basin (in connection with evaluating the outlook of this region for the production of certain useful minerals)". Leningrad, 1958. 21 pp (All-Union Sci Res Geol Inst VSEGEI), 100 copies (KL, No 5, 1959, 145)

Shirokov V.L.

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182. *Amphibolite* (*Amphibole-schist*) with *Plagioclase* and *Quartz*. *Amphibolite* (*Amphibole-schist*) with *Plagioclase* and *Quartz*.

12  
Influence of Electrolytes on the Conductivity of Water  
H. H. Willard and J. C. Dill  
Chemical Department of the University of Michigan  
and the General Classification of Electrolytes  
Henry Bock and F. J. Menger  
Chemical Department of the University of Michigan  
and the General Classification of Electrolytes  
H. H. Willard and G. S. Miller  
Chemical Department of the University of Michigan  
and the General Classification of Electrolytes  
H. H. Willard and G. S. Miller  
Chemical Department of the University of Michigan  
and the General Classification of Electrolytes

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

BASKOV, Ye.A.; SHUGRIN, V.P.

Comparability of analyses of dissolved gases recovered by various  
methods. Trudy MNI no.22:98-106 '58.  
(Gas, Natural) (MIRA 12:4)

MAKSIMOV, V.M.; BASKOV, Ye.A.

Underground water of Jurassic deposits in the Yakutsk region.  
Zap. IGI 34 no.2:55-60 '58. (MIRA 12:6)  
(Yakutsk region--Water, Underground)

MAKSIMOV, Vasiliy Mikhaylovich, dotsent, kand.geologo-miner.nauk; ASATUR, K.G., dotsent, kand.tekhn.nauk; DAVIDOVICH, V.I., dotsent, kand.tekhn.nauk; AIBUL, S.P., kand.geologo-miner.nauk; PAUKER, N.G., inzh.-gidrogeolog; OSTROUMOV, B.P., gidrotekhnik; ZAYTSEV, I.K., doktor geologo-miner.nauk; TOLSTIKHIN, N.I., prof., doktor geologo-mineral.nauk; REZNIKOV, A.A., kand.khim.nauk, starshiy nauchnyy sotrudnik; MERSHALOV, A.F., assistent; VOROTINTSEV, V.T., dotsent, kand.tekhn.nauk; MAKKOV, I.A., dotsent, kand.geologo-miner.nauk; KREKIS, Ye.Ye., dotsent, kand.geologo-miner.nauk; KHITROV, I.H., inzh.-geolog; BOROVITSKIY, V.P., kand.geologo-miner.nauk; RAVDOWIKAS, O.V., kand.geologo-miner.nauk; ONIN, N.M., kand.geologo-miner.nauk; BASKOV, Ya.A., inzh.-gidrogeolog; NOVOZHILOV, V.W., dotsent, kand.geologo-miner.nauk; PEKEL'NYY, I.S., inzh.-gidrogeolog; NEVEL'SHTEYN, Yu.G., inzh.-gidrogeolog; BOSKIS, S.G., inzh.-gidrotekhnik; NIKIFOROV, Ye.M., inzh.-gidrogeolog; GATAL'SKIY, M.A., prof., doktor geologo-miner.nauk, nauchnyy red.; DOLMATOV, P. S., nauchnyy red.; GEN-MAD'YEVA, I.M., tekhn.red.

[Hydrologist's handbook] Spravochnoe rukovodstvo gidrogeologa. Leningrad, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-nie, 1959. 836 p. (MIRA 12:4)

1. Vsesoyuznyy geologicheskiy nauchno-issledovatel'skiy institut  
(for Reznikov).

(Hydrology)

RAZUMOVSKAYA, Ye.E.; ZAYTSEV, I.K.; BASKOV, Ye.A.; DRAGUNOV, V.I.;  
PISARCHIK, Ya.K.

Prospects for finding oil and gas in the Siberian Platform. Mat..  
VSEGEI Ob.ser. no.23:3-43 '59. (MIRA 14:11)  
(Siberian Platform--Petroleum geology)  
(Siberian Platform--Gas, Natural--Geology)

BASKOV, Ye.A.

Magnesium chlorides in dolomites of the lower Cambrian in the  
Berezovo trough and their possible genesis. Inform.sbor.  
VSEGEI no.40:135-142 '60.

(MIRA 14:12)

(Aldan Plateau—Dolomite)

(Aldan Plateau—Magnesium chloride)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

BASKOV, Ye.A.

Some problems of the paleohydrogeology of the Siberian Platform.  
Mat. Kom. po izuch. podzem. vod, Sib. i Dal' Vost, no.2:10-18  
'62. (MIRA 17:8)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

ANTIPIN, V.I.; BUDANOV, N.D.; KOTLUKOV, V.A.; LEYBOSHITS, A.M.;  
PROKHOROV, S.P., kand.geol.-miner.nauk; SIRMAN, A.P.;  
FALOVSKIY, A.A.; SHTEYN, M.A.; BASKOV, Ya.A.; BOGATKOV,  
Ye.A.; GANEYEVA, M.M.; ZARUBINSKIY, Ya.I.; IL'INA, Ye.V.;  
KATSIYAYEV, S.K.; KOMPANIYETS, N.G.; NELYUBOV, L.P.;  
PONOMAREV, A.I.; REZNICHENKO, V.T.; RULEV, N.A.; TSELIGOROVA,  
A.I.; ALSTER, R.K.; SHVETSOV, P.F.; VYKHODTSEV, A.P.; KOTOVA,  
A.I.; KASHKOVSKIY, G.N.; LOSEV, F.I.; ROMANOVSKAYA, L.I.;  
PROKHOROV, S.P.; MATVEYEV, A.K., dote., retsentent; CHEL'TSOV,  
M.I., inzh., retsentent; KUDASHOV, A.I., otv. red.; PETRYAKOVA,  
Ye.P., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[State of flooding and conditions for the exploitation of coal-bearing areas in the U.S.S.R.] Obvodnennost' i usloviia ekspluatatsii mestorozhdenii ugol'nykh raionov. Pod nauchn. red. S.P. Prokhorova. Moskva, Gosgortekhizdat, 1962. 243 p.

(MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii. 2. Kafedra geologii i geo-khimii goryuchikh iskopayemykh Moskovskogo Gosudarstvennogo universiteta (for Matveyev).  
(Coal geology) (Mine water)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

BASKOV, Ye.A.; DUTOVA, Ye.N.; KRAMARENKO, L.Ye.

Microflora of underground waters in the southeastern part of the  
Siberian Platform. Inform.sbor.VSEGEI no.56:101-108 '62. (MIRA 17:1)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

BASKOV, Ye.A.; KLINOV, G.I.

Composition and conditions governing the formation of mineral  
waters in Transbaikalia. Trudy VSEGEI 10:50-88 '63.  
(MIRA 17:c)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

BASKOV, Ye.A.; ZAYTSIV, I.K.

Basic characteristics of the hydrogeology of the Siberian Platform.  
Trudy VSEGEI 101:89-151 '63.  
(MIRA 17:9)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

BASKOV, Ye.A.; KLIMOV, G.I.; LIBROVICH, V.L.

Genetic type of Lower Cambrian phosphate manifestations in the  
Yudoma Valley (Eastern Siberia). Min. syr'e no.10:51-54 '64.

(MIRA 18:3)

20357

5.3610

2209, 1153, 1575

S/020/61/136/005/015/032  
B103/B208AUTHORS: Baskov, Yu. V. and Perekalin, V. V.

TITLE: Synthesis and chemistry of allyl nitrite

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 5, 1961, 1075-1078

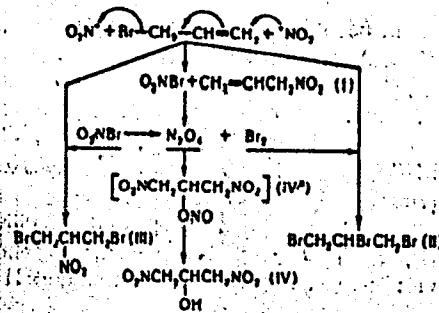
TEXT: The authors obtained a surprisingly good yield of allyl nitrite (I) in the nitration of allyl iodide and allyl bromide with nitrogen tetroxide ( $N_2O_4$ ) in ether at -20°C. The resultant nitrile iodide and nitrile bromide are converted to more stable  $N_2O_4$ , and to molecular iodine and bromine. Contrary to iodine, bromine brominates the initial allyl bromide during its formation, giving 1,2,3-tribromopropane (II). The appearance of 2-nitro-1,3-dibromopropane (III) is explained by nitro-halogenation of allyl bromide by nitrile bromide. If the reaction temperature is increased in the case of allyl iodide and allyl bromide, reaction of the resultant (I) with  $N_2O_4$  leads to the synthesis of 1,3-dinitro propanol-2 (IV) which is considered to be a secondary

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Synthesis and chemistry of ...

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S/020/61/136/005/015/032  
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nitration product. The chlorine-carbon bond in the allyl chloride is very stable, and the halogen is therefore not replaced in this case by the nitro group.



Accordingly, only 1-nitro-3-chloro propanol-2 (V) results from allyl chloride and no (I). The authors studied the chemical conversions of (I), and obtained substances which permitted the structure of some

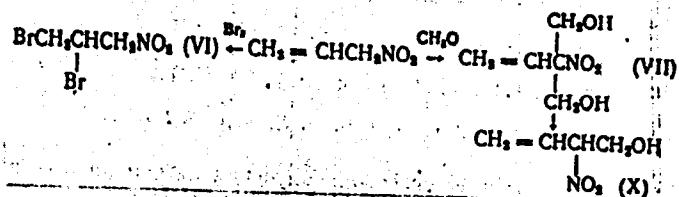
Card 2/4

20357

S/020/61/136/005/015/032  
B103/B208

## Synthesis and chemistry of ...

reaction products of allyl bromide and allyl iodide with  $N_2O_4$  to be clarified. The absence of a pronounced mutual influence of the double bond and the nitro group (Ref. 5) suggests a combination of the properties of ethylene and nitro-ethane in (I). For this reason, the nitration of (I) by  $N_2O_4$  yielded (IV). (IV) was isolated as a result of the hydrolysis of the original nitrate (IVa). Bromination yielded the only possible 1-nitro-2,3-dibromopropane (VI) which is isomeric to (III), and therefore has the structure assumed by the authors. Condensation with formaldehyde gives 2-nitro-2-methylol buten-3-ol-1 (VII) which was characterized by diacetate (VIII), and dibromide (IX).



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B103/B208

## Synthesis and chemistry of ...

(VII) was converted to 3-nitro-buten-1-ol-4 (X) by splitting off the methylol group (in agreement with Ref. 6), which is an initial product in the synthesis of 2-nitro-butadiene-1,3. The authors emphasize that the above reaction is the first example of the synthesis of nitrogen compounds by the substituting nitration of allyl halogen derivatives by  $N_2O_4$ . They assume that its mechanism may be explained by a conjugate allyl rearrangement under participation of allyl iodide, allyl bromide, and  $N_2O_4$ . There are 6 figures and 6 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Leningradskiy pedagogicheskiy institut im. A. I. Gertseva  
(Leningrad Pedagogical Institute imeni A. I. Gertsen)

PRESENTED: September 1, 1960, by M. I. Kabachnik, Academician

SUBMITTED: September 1, 1960

Card 4/4

PEREKALIN, Vsevolod Vasil'yevich; Prinimali uchastiye: SOPOVA, A.V.; LERNER, O.M.; ZONIS, E.S.; ZOBACHEVA, M.M.; KVITKO, S.M.; RASKOV, Yu.V.; KAP-LIN, S.V.; POLYANSKAYA, A.S.; PADVA, G.D.; ZONIS, S.A., red.; FOMKINA, T.A., tekhn. red.

[Unsaturated nitro compounds] Nepredel'nye nitrosoedineniya. Lenin-grad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1961. 335 p.

(Nitro compounds)

(MIRA 14:7)

BASKOV, Yu.V.; PEREKALIN, V.V.

Isomerization of 1-nitro-2-propene. Zhur.ob.khim. 32 no.9:3106  
S '62. (MIRA 15:9)

1. Leningradskiy pedagogicheskiy institut imeni A.I. Gertseva.  
(Propene)

L 44160-55 EPP(c)/EWP(j)/DNA(c)/SNT(x)/T PC-4/PR-1 by

ACCESSION NR: AP5009017

8/0366/65/001/002/0236/0240

AUTHORS: Baskov, Yu. V.; Perekalin, V. V.

TITLE: Synthesis of disconnected nitroalkenes 1

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 2, 1965, 236-240

TOPIC TAGS: halogen compound, nitration, IR spectrum, refractometer

ABSTRACT: The present methods of obtaining disconnected nitroalkenes have many defects, so the authors propose a method involving nitration of 3-bromopropene-1, nitrogen tetroxide and 3-iodopropene-1 nitrogen tetroxide, making 3-nitropropene-1 compounds. In developing the process, nitration by nitrogen tetroxide at -20°C in ether was investigated for several halogen derivatives having a double bond in the allyl position: 2,3-dibromopropene-1; 1,2-dibromo-4-butene-1, a mixture of 1,2-dibromo-4-butene-1 and 1-bromo-2-butene-1; 1,2-dibromo-3-methylbutene-1; 1,2-dibromo-2-methylbutene-1; and 1-bromo-2,3-dimethylbutene-1. Yields of 10-15% were obtained of 2-nitro-3-bromopropene-1; 3-nitro-2-butene-1, a mixture of 1-nitro-4-butene-1 and 3-nitrobutene-1; 3-nitro-2-methylpropene-1; 4-nitropentene-2; 3-nitro-3-methylbutene-1; and 3-nitro-2,3-dimethylbutene-1. The structure of these nitroalkenes was determined by acetate synthesis according

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ACCESSION NR: AP5009017

to the method of W. Maier, by IR spectra, and by refractometer measurements.  
The reaction probably takes place by a synchronous homolytic mechanism accompanied  
by allyl regrouping according to the following scheme:



The reactions with derivative products and properties of these products are  
tabulated. Orig. art. has 1 table.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut  
Gertsen's Leningrad State Pedagogical Institute

SUBJECT: Ojhovoy

ENCL: 00

SUB CODE: 00

NO REF Sov: 004

OTHER: 008

Card 2/2/6

BASKOVA, I.P.; BUDZINSKIY, A.Z. [Budzynski, A.]

Fractionation and characteristics of the early products of fibrinogen proteolysis by plasmin. Biokhimia 30 no.2:322-326 Mr.-Ap '65.

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi Moskovskogo gosudarstvennogo universiteta imeni Lomonosova i Otdeleniya radiobiologii i okhrany zdorov'ya Instituta yadernykh issledovanij Pol'skoy Akademii nauk, Varshava. (MIRA 18:7)

BASKOVA, I.P.; KOVALEVA, T.B.

Thermostable products forming in fibrinogen proteolysis by  
plasmin. Biokhimia 30 no.4:734-738 Jl-Ag '65. (MIRA 18:8)

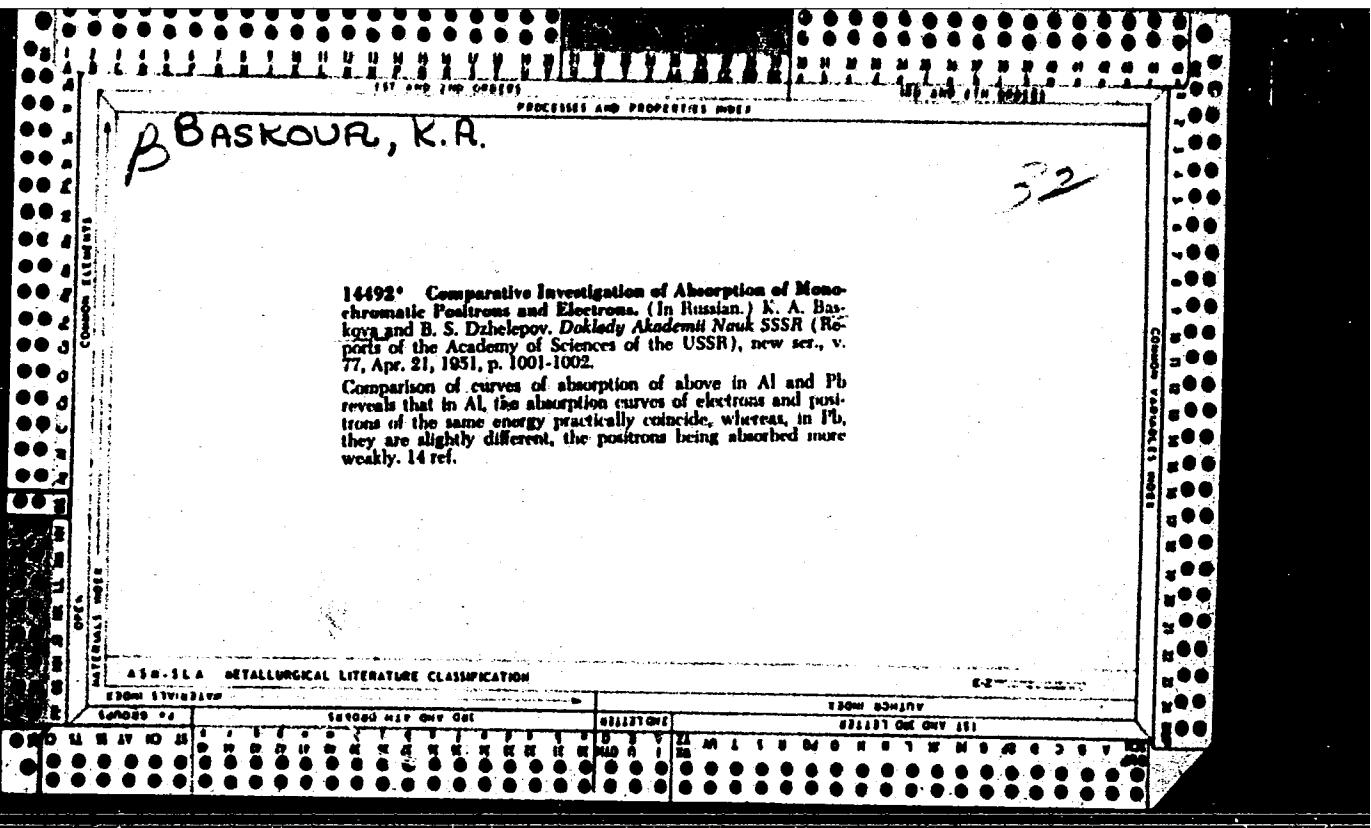
1. Laboratoriya fiziologii i biokhimii svetyvaniya krovi  
Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

BASKOVA, K.A.; VASIL'YEV, S.S.; NO SEN CHAN; SHAVTVALOV, L.Ya.

Decay scheme of Br<sup>75</sup>. Zbir. eksp. i teor. fiz. 41 no.5:1484-1486  
N '61. (MIRA 14:12)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo  
universiteta.

(Bromine—Decay)



POLSKOVKA

U.S.R.

Half-life of phosphorus-30. K. Baskova and A. Karabasova. Zhur. Eksp. i Teor. Fiz., 33, 487 (1957). VINITI NMR, 56A, 470 (1958).--Special expts. were carried out in order to establish more exactly the half-life of  $P^{30}$ , which was found to be  $2.53 \pm 0.02$  min. R.D.H.

R.D.H.  
J.W.

~~USSR/Physics - Positron absorption~~

FD-1358

Card 1/1 : Pub. 146-3/18

Author : Baskova, K. A., and Gorbachev, V. M.

Title : Comparative investigation of the absorption of monoenergetic positrons and electrons in copper and cadmium

Periodical : Zhur. eksp. i teor. fiz., 26, pp 270-274, Mar 1954

Abstract : The authors present the results of comparative measurements of the absorption of monoenergetic positrons and electrons of equal energies in copper and cadmium. They show that the observed difference in absorption of positrons and electrons of equal energy increases with increase of the ordering number of the absorber. It is confirmed that positrons are absorbed in heavy substances noticeably more weakly than electrons. Ten references, 8 Western and 2 USSR (K. A. Baskova and B. S. Dzhelepov, DAN SSSR, 77, 1001, 1951; I. P. Selinov, Atomnyye yadra i yadernyye prevrashcheniya (Atomic nuclei and nuclear conversions), GITTL, Moscow-Leningrad, 1951).

Institution : Leningrad State University

Submitted : April 16, 1953

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

BASKOVA, K. P.

STUDIES OF ANGULAR DISTRIBUTIONS OF  $\gamma$  QUANTA  
DURING POSITRON ANNIHILATION IN VARIOUS MA

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

## AUTHORS:

Basina, A. S., Baskova, G. A.,  
Dzhelepov, B. S., Dolgoborodova, M. L.

DDV/48-22-B-11/20

## TITLE:

Investigation of the Angular distribution of  $\gamma$ -Quanta in the  
Annihilation of Positrons in Liquid Hydrogen and Helium  
(Issledovaniye uglovogo raspredeleniya  $\gamma$ -kvantov pri  
annigilyatsii pozitronov v zariakh vodoroda i gelii)

## PERIODICAL:

Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958,  
Vol. 22, Nr 8, pp. 969-975 (SSSR)

## ABSTRACT:

On the basis of the evidence available, it is impossible to clarify completely the mechanism of positron annihilation in condensed media. It was found that the annihilation mechanism is different, at least to a certain extent, in metals and in amorphous media. As a rule in metals the annihilation process of positrons takes place only on free electrons. The number of positrons is reduced exponentially with time. The average life (in all metals) is  $1.5 \cdot 10^{-10}$  sec. In amorphous substances, however, two components become visible in the decay curves which correspond to differing annihilation mechanisms with decay periods of  $\sim 10^{-7}$  and  $\sim 10^{-2}$  sec and

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Investigation of the Angular Distribution of  $\gamma$ -Quanta in the Annihilation of Positrons in Liquid Hydrogen and Helium  
M7/16-22-8-11/

which differ for different substances. This is attempted to be explained by regarding the formation of positronium in the amorphous media. In this paper the angular distribution of the annihilation quanta in liquid hydrogen and helium was investigated. The measuring method and the principal lay-out of the plant do not differ basically from those used in the earlier work (Ref 9). The curves of the angular distribution for both substances are given in figure 3. As can be seen from it the shape of these curves differs from that of the curves for aluminium. The angular distribution curve for aluminium agrees with that obtained by Green (Grin) and Stewart (Stuart) (Ref 10) and by Lang, Le Benedetti and Juchowski (Ref 11). It is attempted to explain this curve shape by the formation of positronium in hydrogen and helium by positrons with a sufficiently high energy. Observed cases of an emission of  $\gamma$ -quanta at wide angles (at  $\theta > 1^\circ$ ) is apparently caused by not completely slow-down positrons, as no electrons with such an energy can be found in hydrogen or helium which would correspond to the great emission angles.

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Investigation of the Angular Distribution  
of  $\gamma$ -Quanta in the Annihilation of Positrons in Liquid Hydrogen and Helium

SOV/48-22-8-11/20

observed. The smaller number of such cases observed in aluminium appears to be of a somewhat peculiar significance. The curve of the angular distribution for helium is wider than that for hydrogen, which fact is connected with the higher velocity of the electrons in helium. The experimental curves of angular distribution of  $\gamma$ -quanta differ from those computed by Chzhan Li (Ref 5), (Figs 5,6). The spectrum of the center-of-mass energy of the annihilating pairs can be constructed from the curve of the angular distribution of the  $\gamma$ -quanta. As a result of the computations energy spectra of the positron annihilation in liquid hydrogen and helium were obtained (Figure 7). As regards the spectrum for aluminium, which is also given in figure 7, no judgment can be passed on it, as the curve was constructed from six points only. The authors express their gratitude to the Director of the Institute of Physical Problems, AS USSR, imeni S.I. Vavilov, P.L. Kapitsa and A.I. Shal'nikov.

There are 7 figures, 1 table, and 11 references, 2 of which are Soviet.

Card 3/4

Investigation of the Angular Distribution  
of  $\gamma$ -Quanta in the Annihilation of Positrons in Liquid Hydrogen and Helium

SOV/48-22-8-11/2C

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo  
gos. universiteta im. A.A. Zhdanova (Scientific Research  
Institute of Physics at the Leningrad State University imeni  
A.A. Zhdanov)

Card 4/4

BASKOVA, K.A.; DZHELEPOV, B.S.; KOMISSAROVA, Z.A.

Positron annihilation in sulfur, selenium, and silicon. Zhur.  
eksp. i teor. fiz. 40 no.4:1001-1003 Ap '61. (MIRA 14:7)

1. Leningradskiy gosudarstvennyy universitet.  
(Positrons) (Quantum theory)

s/056/62/042/002/018/055  
B102/B138

AUTHORS: Baskova, K. A., Vasil'yev, S. S., No Seng Ch'ang, Shavtvalov,  
L. Ya.

TITLE: Investigation of some radioactive nuclei in the range of  
filled  $1f_{7/2}$  shells

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,  
no. 2, 1962, 416-426

TEXT: A magnetic thin-lens  $\beta$ -spectrometer and a scintillation  $\gamma$ -spec-  
trometer were used to investigate the radiation emitted by Ni<sup>65</sup>, Co<sup>55</sup>,  
Mn<sup>51</sup>, V<sup>47</sup>, and Se<sup>83</sup> nuclei. These isotopes were produced by proton or  
deuteron irradiation of enriched targets in the cyclotron of the NIIYaF MGU.  
The following results were obtained: 2.5-hr Ni<sup>65</sup> was produced in the reac-  
tion Ni<sup>64</sup> (d,p)Ni<sup>65</sup>. In the Ni<sup>65</sup> spectrum three partial  $\beta^-$ -transitions  
with  $2120 \pm 40$ , 1050 and 620 kev end-point energies (intensities 57, 14 and  
29%) and 370, 1120, 1490, 1630 and 1720 kev  $\gamma$ -transitions were observed.  
 $\beta^-$ - $\gamma$ -coincidences were observed at 1490 kev and 1120 kev gamma energies.

Card 1/Q 4

Investigation of some radioactive ...

8/056/62/042/002/018/055  
B102/B138

18-hr Co<sup>55</sup> was produced in the reaction Fe<sup>54</sup>(d,n)Co<sup>55</sup>, the end-point energies of the three β<sup>+</sup>-spectrum components were 1500 ± 30, 1040 and 550 kev (56, 41, 3%), gamma lines were observed at 940, 1410, 1800 and 2180 kev. The β<sup>+</sup>-transition with the end-point energy 1500 kev takes place to an excited level with subsequent emission of 940-kev gamma rays. β<sup>-</sup> coincidence was observed for 1410 and 940 gamma quanta, the end-point energy of the β<sup>+</sup> particles was 1040 kev. The 44-min Mn<sup>51</sup> was obtained from Cr<sup>50</sup>(d,n)Mn<sup>51</sup> reactions. The end-point energy of the two β<sup>+</sup> spectrum components are at 600 and at 2170 ± 60 kev, in the γ-spectrum hitherto unknown lines were observed at 1560 and 2030 kev, with a half-life of 50 ± 10 min. The 1560-kev transition is assumed to follow the 600-kev β<sup>+</sup>-decay, the 1569 and 2030-kev levels belong to the reaction

V<sup>51</sup>(p,n)Cr<sup>51</sup>. The 33-min V<sup>47</sup> isotope was obtained from Ti<sup>47</sup>(p,n)V<sup>47</sup>. It is shown a simple β<sup>+</sup> spectrum with an end-point energy of 1890 ± 30 kev, gamma lines were observed at 1800 and 2160 kev, the latter unknown up to now. The 25-min Se<sup>83</sup> was produced by a (d,p) reaction from Se<sup>82</sup>. Three β<sup>-</sup> components were found with 1.0, 1.8 and 3.3 Mev end-point energies

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Investigation of some radioactive ...

8/056/62/042/002/018/055  
B102/B138

(58, 40, ~2%); the latter is a new. Gamma transitions were recorded at 220, 355, 530, 780, 1060, 1300, 1480, 1850 and 2300 kev. Only those with 220, 355, 1850 and 2300 kev belonged to the 25-min activity, the others to Br<sup>82</sup>. The results are discussed on the assumption that one group of the odd nuclei investigated had one nucleon outside the filled 1f<sub>7/2</sub> shell, and in the other group one nucleon is deficient to fill this shell. Nuclei with 29 p or n have similar excited levels at ~600, 1000 and 1400 kev, those with 27 p or n only at ~1400 kev. The excitation energy decreases with increasing number of even p and increases with the number of even n. The configurations of the ~1400-kev levels will be

$(1f_{7/2})^{-1}(2p_{3/2})^2$  for Z(N) = 29 and  $(1f_{7/2})^{-2}(2p_{3/2})^1$  for Z(N) = 27.

Yu. A. Vorob'yev, V. S. Zazulin, A. A. Vasil'yev, and I. Ya. Ushakov are thanked for help. There are 16 figures, 1 table, and 22 references: 2 Soviet and 20 non-Soviet. The four most recent references to English-language publications read as follows: L. H. Th. Rietjens et al. Phys. Rev. 120, 527, 1960; M. K. Ramaswamy et al. Proc. Intern. Conf. Nucl. Struc. Canada, 1960, p. 963. R. W. Bauer, M. Deutsch. Nucl. Phys. 16, 264,

Card 3/4

Investigation of some radioactive ...

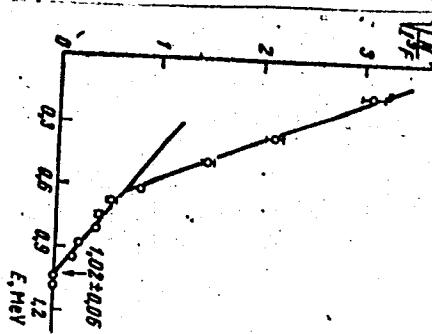
S/056/62/042/002/018/055  
B102/B138

1960; M. Nozawa et al. J. Phys. Soc. Japan, 15, 2137, 1960.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo  
universiteta (Institute of Nuclear Physics of Moscow State  
University)

SUBMITTED: September 23, 1961

Fig. 13



Card 4/4

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

BASKOVA, K.A.; VASIL'YEV, S.S.; KHANO-LEYLA, M.A.; SHAVTVALOV, L.Ya.

Radiations from  $W^{187}$  and  $Tl^{200}W^{187}$  ( $T = 24$  hrs).  
Izv. AN SSSR. Ser. fiz. 27 no.10:1258-1260 O '63.

(MIRA 16:10)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

BASKOVA, K. A.; VASIL'YEV, S. S.; KHAMO-LEYLA, M. A.; SHAVTVALOV, L. Ya.

"Investigation of the Radiations of Radioactive Isotopes Sc<sup>43</sup>, Cr<sup>49</sup>, Ga<sup>68</sup>, Ge<sup>69</sup>, and Sb<sup>117</sup>."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22  
Feb 64.

NIIYaF, MGU (Sci Res Inst Nuclear Physics, Moscow State Univ)

BASKOVA, K.A.; VASIL'YEV, S.S.; KHANO-LEYLA, M.A.; SHAVTVALOV, L.Ya.

Study on  $\beta$  and  $\gamma$ -radiation from  $^{43}\text{Sc}$  and  $^{117}\text{Sb}$ . Zhur eksp. i teor.  
fiz. 47 no. 3:1162-1164 S '64. (MIRA 17:11)

L 11016-65 EWT(m) DIAAP/SSD

ACCESSION NR: AP4046438

S/0056/64/047/003/1162/1164

AUTHORS: Baskova, K. A.; Vasil'yev, S. S.; Khamo-Leyla, M. A.;  
Shavtvalov, L. Ya.

TITLE: Investigation of Beta and Gamma Radiation from Sc-43 and  
Sb-117 /9

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47,  
no. 3, 1964, 1162-1164

TOPIC TAGS: scandium, antimony, beta radiation, gamma radiation,  
beta spectrum, gamma spectrum, beta gamma correlation

ABSTRACT: The  $\beta$  spectra of the two isotopes were determined with a magnetic-lens  $\beta$  spectrometer described by the authors previously (ZhETP v. 42, 416, 1962). The  $\gamma$  spectrum was measured in a scintillation  $\gamma$  spectrometer with a 100-channel pulse-height analyzer. The  $\beta$  spectrum of Sc<sup>43</sup> showed the presence of three partial  $\beta$  spectra

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L 11016-65

ACCESSION NR: AP4046438

with end point energies  $1220 \pm 40$  keV (67%),  $820$  keV (26%), and  $450$  keV (7%). The  $\gamma$  spectrum showed easily resolved lines with energies  $219$ ,  $370$ ,  $620$ , and  $960$  keV with corresponding intensities (taken equal to  $100$ ).  $\beta-\gamma$  coincidences were measured for  $Sc^{43}$  with a scintillation spectrometer connected in coincidence with a single-channel scintillation spectrometer and gave end point values which agree well with the end point values  $620 \pm 40$  and  $500 \pm 40$  keV, which agreed well with the values of the end point energies determined by the composition of the partial  $\beta^+$  spectra. In the case of  $Sc^{43}$ , the  $\beta$  spectrum proved to be simple with an end point energy  $570 \pm 40$  keV, in agreement with the only published data. The  $\gamma$  spectrum contains a single 160-keV line, whose intensity referred to a single  $\gamma$  particle is 44.4. The  $\beta-\gamma$  coincidences, measured with apparatus described in the cited reference by the authors, also confirmed earlier published results by McGinnis (Phys. Rev. v. 97, 93, 1955). "The authors thank Yu. A. Vorob'yev, V. S. Zazulin, and N. S.

Card 2/3

L 11016-65  
ACCESSION NR: AP4046438

Kirichev for help with the work." Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 10Mar64

SUB CODE: NP

NR REF Sov: 002

ENCL: 00

Card 3/3

BASKOVA, K.A.; VASIL'YEV, S.S.; RUDENKO, N.P.; SEVAST'YANOV, A.I.;  
KHANOLEYLA, M.A.; SHAVTVALOV, L.Ya.

Studying the radiation from  $^{117}\text{Cd}$ . IAd. fiz. 2 no.3:402-  
408 S '65.

(MIRA 18:9)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo  
universiteta.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

APPROVED FOR RELEASE: 06/06/2000

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"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

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CIA-RDP86-00513R000203910009-7"

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7

SUBMITTED: OO

ENCL: OO

SUB CODE: NP

NR REF SCV: 001

OTHER: 00

Card 3/3

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"

L 15177-66 ENT(m) DIAAP

ACC NR: AP6001143 SOURCE CODE: UR/0367/65/002/003/0402/0408

AUTHOR: Baskova, K. A.; Vasil'yev, S. S.; Rudenko, N. P.; Sevast'yanov, A. I.; Khamo-  
Leyla, M. A.; Shavtvalov, L. Ya.

ORG: Institute of Nuclear Physics, Moscow State University (Institut yadernoy fiziki  
Moskovskogo gosudarstvennogo universiteta)

TITLE: Investigation of the radiation of  $^{117}_{48}\text{Cd}$

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 402-408

TOPIC TAGS: cadmium, beta spectrum, half life, isotope separation, indium

ABSTRACT:  $\text{Cd}^{117}$  was obtained from the reaction  $\text{Cd}^{116}$  (d, p). As a result of the investigations conducted it is shown that the half-life of  $\text{Cd}^{117}$  is about three hours. The half-life of  $\text{In}^{115}$  previously ascribed erroneously to  $\text{Cd}^{117}$  is, apparently, that of  $\text{In}^{116}$  obtained from the reaction  $\text{Cd}^{116}$  (d, 2n). The beta-spectrum of  $\text{Cd}^{117}$  (3 hr) was investigated on a beta-spectrometer with a magnetic lens. The upper boundaries of the partial beta-spectra have the energy of 670; 1290; 1800; and 2200 kev. The value of  $\log ft$  proved to be equal to 4.9; 6.7; 6.9; and 7.6, respectively. The results presented, as well as the investigations of the  $\beta\gamma$ -coincidences made it possible to construct a decay scheme of  $\text{Cd}^{117}$  which differs substantially from that in the literature. Authors express their gratitude to Yu. A. Vorob'yev, V. S. Zazulin, N. S. Kirnichev, and M. R. Akhmed for assistance in the work. Orig. art. has: 7 figures and 1 table.

Card 1/1 SUB CODE: 20, 18 / SUBM DATE: 19Feb65 / ORIG REF: 001 / OTH REF: 012

BASKOVA, K.A.; VASIL'YEV, S.S.; KHAMO-LEYLA, M.A.; SHAVTVALOV, L.Ya.

Study of the radiations from  $Tc^{94}$ ,  $Tc^{96}$ , and  $Zr^{87}$ . Izv. AN  
SSSR. Ser. fiz. 29 no.12;2255-2263 D '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo  
gosudarstvennogo universiteta.

~~BASKOVA, T.H.~~

Extracurricular work in physics and technology. Fiz. v shkole 17  
no.2:76-78 Mr-Ap '57.  
(MLRA 10:3)

1. Mar'inskaya srednyaya shkola, Mariyskaya ASSR.  
(Physics--Study and teaching)  
(Technical education)

EAS:CV4, Z. I.

USSR/Chemistry - Acetylene Derivatives

Oct 51

"Action of Aluminum Amalgams on 3-Chloro-3-Methylbutyne-1," T. I. Temnikova, Z. A. Baskova,  
Chair of Structure of Org Compds, Leningrad State U imeni A. I. Zhdanov

"Zhur Obshch Khim" Vol XXI, No 10, pp 1823-1825.

Reduction of 3-chloro-*e*-methylbutyne-1 with Al amalgam in boiling aq Et alc yields mixt  
of hydrocarbons: isopylacetylene (~30%), isopropenylacetylene (~60%), and nonsyn  
dimethylallene (~10%)

PA 194T29

BASKOVA, Z. A., KHAIMOVA, M. A. and TEMNIKOVA, T. I.

On the Addition of Iodine Chloride to  $\alpha,\beta$ -Diphenylpropylene and  
 $\alpha,\beta$ -Diphenylethylene, page 874, Sbornik statey po obshchey khimii  
(Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad,  
1953, pages 1680-1686.

Chair of the Structure of Organic Compounds, Leningrad State U

BASKUNA, 22 A.

USSR.

Addition of iodine chloride to 1,1-diphenylpropane and 1,1-diphenylethyrene. V. I. Ternikova, Z. A. Baskova, and M. A. Khol'mova. (Leningrad State University). *Soviet Otkryt. Khim.* 2, 874-7 (1964). To 7 g. Ph<sub>2</sub>C:CHMe in CHCl<sub>3</sub> was added with ice cooling 14.6 g. ICl in CHCl<sub>3</sub>; a ppt. of iodine was observed and considerable HCl evolved. After 2 hrs, stirring the mixt. was washed with Na<sub>2</sub>SO<sub>4</sub> (analysis of this showed 10.45 g. iodine in the soln.) and the org. layer on evapn. gave 40-50% Ph<sub>2</sub>C:CH<sub>2</sub>Cl, b. 200-8°, b. 130-5°, m. 38-9° (after long standing); d<sub>4</sub> 1.103, n<sub>D</sub><sup>20</sup> 1.6007. Ozonolysis of this requires 2 days because of very slow reaction with O<sub>3</sub>. BzPh and BrOH were obtained, thus proving the structure. Apparently the admn. of ICl gave Ph<sub>2</sub>CClIClMe which lost HCl and yielded the final product. Similar reaction in CHCl<sub>3</sub> of 10 g. Ph<sub>2</sub>C:CH<sub>2</sub> with ICl (from 7 g. iodine) gave after evapn. of the washed org. layer a dark oil, which could not be stdzd. because of evolution of iodine and decompr. on heating. This oil with 10% alc. KOH gave 3.5 g. Ph<sub>2</sub>C:CH<sub>2</sub>, b. 128-32°, d<sub>4</sub> 1.1664, n<sub>D</sub><sup>20</sup> 1.6212; ozonolysis yielded BzPh. Thus, in this reaction the initial product was Ph<sub>2</sub>CClCH<sub>2</sub>I.

G. M. Kos

CH  
②

MK  
MK

*BASKOVA, Z.A.*

**BASKOVA, Z.A.; NOVIKOV, G.I.**

**Isolation of small amounts of lead by means of the reducing roasting  
in vacuum [with summary in English]. Geokhimiia no.7:580-582 '57.  
(MIRA 11:1)**

**1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,  
Leningrad.**

**(Lead)**

3(5), 3(8)

AUTHORS: Rabinovich, A. V., Baskova, Z. A. SOV/7-59-6-9/17

TITLE: The Lead Distribution in Some Granitoids of Eastern Transbaikalia

PERIODICAL: Geokhimiya, 1959, Nr 6, pp 546 - 549 (USSR)

ABSTRACT: The lead content of the minerals was investigated in the following rocks: quartz-diorite of Klichka (14 g Pb per ton of rock), granodiorite of Shakhtama (20 g/t), biotite granite of Mallyy Soktuy (28 g/t). These granitoids belong to a polymetallic, a molybdenum- and a tin - tungsten ore formation respectively. Lead was chemically determined by wet treatment: lead was extracted from the solution in form of dithizonate with chloroform, and thereupon polarographically - or in individual cases - colorimetrically determined. The results are tabulated and show that the highest percentage of lead content (37 - 70 %) is contained in feldspar; the feldspar portion of the lead content decreases in the following order: quartz-diorite (69,3 %), granodiorite (46,5 %), biotite granite (37,3 %). The lead content of the quartz diorites is lower than that of the granites of the tin - tungsten ore formation. It is interesting that the zirconium of quartz diorites contains very small galenite in-

Card 1/2

The Lead Distribution in Some Granitoids of  
Eastern Transbaikalia

SOV/7-59-6-9/17

clusions. The isotopic composition of this type of lead is characteristic of hydrothermal origin. A further investigation is necessary. S. S. Smirnov, L. V. Tavson, and L. A. Kravchenko are mentioned. There are 1 table and 1 Soviet reference.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,  
Leningrad (All-Union Geological Scientific Research Institute,  
Leningrad)

SUBMITTED: December 22, 1958

Card 2/2

5(2)

AUTHOR:

Baskova, Z. A.

SOV/75-14-1-15/32

TITLE:

On the Problem of Determining Small Amounts of Lead in Rocks  
(K voprosu ob opredelenii malykh kolichestv svintsa v gornykh  
porodakh)

PERIODICAL:

Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 1, pp 75-80  
(USSR)

ABSTRACT:

Investigations of lead concentration yielded the following results: 1) Lead concentration by extraction of its dithizonate with chloroform direct from the solution obtained by decomposing the weighed sample allows an average 91% of the total lead content to be separated from rocks. As compared to methods based on co-precipitation, the above extraction method takes less time. 2) A concentration by co-precipitation of lead with sulfide of mercury and zinc does not serve the purpose. Mercury sulfide allows the determination of only 60-70% and zinc sulfide 80-90% of the lead content. Moreover, these concentrates contain large impurities from other elements participating in the co-precipitation. 3) Co-crystallization of lead with sulfates of alkaline earth and subsequent separation of lead by extraction allows the separation of an average 76%

Card 1/3

On the Problem of Determining Small Amounts of  
Lead in Rocks

SOV/75-14-1-15/32

of the lead content. This method requires several operations which retard the determination and may cause losses of lead. 4) Extraction of lead diethyl-dithiocarbamate and subsequent re-extraction of lead from organic solutions with diluted hydrochloric acid permits the separation of all those elements that are a source of disturbance to the subsequent photometric determination with dithizone (bismuth and thallium in the first place). An average 97% of the lead content is determined by this way. 5) Concentration by distilling lead from the carbon-mixed sample allows yields of 80-100%. An advantage offered by this method is the possibility of separating lead quickly and in a simple way also in the case of relatively large weighed samples (2-10 g). 6) The final photometric determination of lead as dithizonate is sufficiently sensitive. It allows the determination of lead in the concentrate with satisfactory accuracy and permits the use of relatively small weighed samples. A disadvantage of this method is the use of potassium cyanide. The polarographic method allows a most accurate determination of small amounts of lead that are separated from a little larger weighed samples (1-2 g). No potassium cyanide

Card 2/3

On the Problem of Determining Small Amounts of  
Lead in Rocks

SOV/75-14-1-15/32

is needed here. 7) On choosing the method of separating and determining lead, the composition of the respective material, as well as the amount available are to be taken into account. The author thanks Yu. V. Morachevskiy for valuable advice. There are 1 table and 16 references, 10 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,  
Leningrad (All-Union Scientific Research Institute of Geology,  
Leningrad)

SUBMITTED: January 2, 1958

Card 3/3

BASKOVA, Z.A.

Investigating the possibility of separating germanium from  
siliceous rocks by the removal method in gas flow with the  
subsequent chromatographic determination. Inform.sbor.VSEGEI  
no.51:73-87 '61.

(Germanium--Analysis) (Rocks, Siliceous--Analysis)  
(Chromatographic analysis) (MIRA 15:8)

"APPROVED FOR RELEASE: 06/06/2000

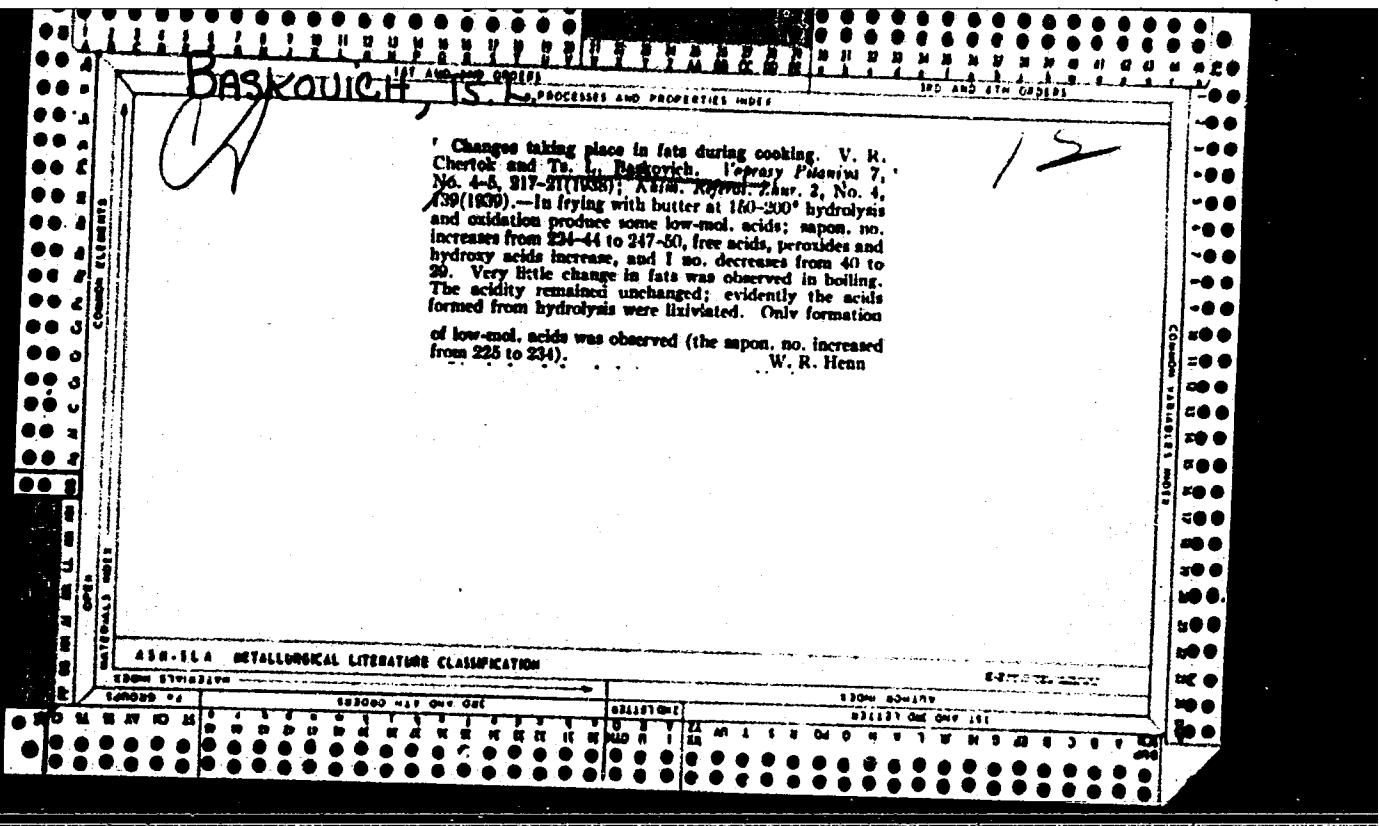
CIA-RDP86-00513R000203910009-7

SMIRNOV, K.M.; BASKOVICH, B.L.; OSIPOVA, O.V.; PARASHIN, Ye.V.

Effect of different respiration exercises on changes in the  
timing of motor reactions. [Trudy] GIDUV no.35:44-51'62. (MIRA 16:6)  
(RESPIRATION) (MOTION STUDY)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203910009-7"



BASKOVICH, B.L.

Insulin shock in mammals and birds. Zhur. evol. biokhim. i  
fiziol. 1 no. 5:466-476. S.-O. '65. (MIRA 18:10)

I. Laboratoriya patologii vysahoy nervnoy dayatal'nosti cheloveka  
Instituta evolyutsionnoy fiziologii i biokhimii imeni Sechenova  
AN SSSR, Leningrad.

BASKOVICH, TS. L.; CHERNOV, I. I.

Hygienic characterization of the food of trade school students.  
Gig. i san., no. 8:48 Ag '54.  
(MLRA 7:9)

1. Iz Khar'kovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.  
(SCHOOL CHILDREN—FOOD)

NIKHINSON, I.M.; BASKOVICH, TS.L.; SHVETS, TS.I.

Method for the bacteriological study of convalescents and those  
who have had dysentery. Lab. delo 7 no.12:36-37 D '61.

1. Khar'kovskaya oblastnaya sanitarno-epidemiologicheskaya  
stantsiya (glavnnyy vrach I.I.Chernov).  
(DYSENTERY)

(MIRA 14:11)

DOBODKIN, B. A., TARASOVA, Z. N., BAS'KOVSKAYA, M. O., and KAPLUNOV, M. Ya.  
(Scientific Research Institute of the Tire Industry)

"The Formation of Vulcanization Structures and Their Modification by Thermo-Chemical Reaction and Fatigue."

Isotopes and Radiation in Chemistry, Collection of Papers of 2nd  
All-Union Sci. Tech. Conf. on Use of Radioactive and Stable Isotopes and  
Radiation in National Economy and Science, Moscow, Izd-vo AN SSSR, 1958, 380pp.

This volume publishes the reports of the Chemistry Section of the  
2nd All-Union Sci. Tech. Conf. on Use of Radioactive and Stable Isotopes and Radiation  
in Science and the National Economy, organized by Acad. Sci. USSR and Main  
Admin for Utilization of Atomic Energy under Council of Ministers USSR,  
Moscow, 4-12 April 1957.

BASKUNSKIY, I. N., inzh.

Labyrinth steam regulator of a turbine. Energetik 8 no.1:  
10-11 Ja '60.  
(Steam turbines) (MIRA 13:5)

8(0)

SOV/112-59-2-2933

Translation from: Referativnyy zhurnal Elektrotehnika. 1959, Nr 2, p 96 (USSR)

AUTHOR: Kostrauskas, P., and Baskutis, P.

TITLE: Some Properties of Gorev-Park Equations for the Synchronous Machine  
(O nekotorykh svoystvakh uravneniy Goreva-Parka dlya sinkhronnoy mashiny)

PERIODICAL: Tr. Kaunassk. politekhn. in-ta, 1957, Vol 7, pp 75-84 (summary  
in Lithuanian)

ABSTRACT: Stability of operation of a synchronous motor is considered. On the basis of Gorev-Park equations, a set of linearized small-deviation equations is derived; the indicial equation of the linearized system is analyzed for the case of a motor without amortisseur windings on its rotor. It is pointed out that in this case, the indicial equation has one real and two pairs of complex roots: (1) the real root is proportional to the energy dissipation factor of the field circuit  $r/X_r$ , where  $r$  and  $X_r$  are resistance and inductance of the field windings; (2) the complex roots are explicitly independent of  $r/X_r$ ; (3) one

Card 1/2

SOV/112-59-2-2933

Some Properties of Goren-Park Equations for the Synchronous Machine pair of the complex roots contains the factor  $1/\sqrt{H}$ , where  $H$  is the rotor inertial constant; the second pair of complex roots is independent of  $H$ . Based on these properties, approximate expressions are obtained for all complex roots, and the conclusion is drawn that the locus of the motor stable operation is practically independent of  $r/X_r$  or  $H$ . Bibliography: 2 items.

I.M.S.

Card 2/2

GUBENKO, Tikhon Pavlovich. Prinimalni uchastiye: KARANDEYEV, K.B., prof.; retsenzent; BASKUTIS, P.A., prof., retsenzent; KOSTENKO, D.P., dots., retsenzent; LUKIN, V.I., dots., otv. red.; BLIKH, V.V., red.; SARANYUK, T.V., tekim. red.

[Loci of the electric current of induction machinery; application and methodology for designs] Geometricheskie mesta tokov induktsionnykh mashin; metodika postroenii i primenenie. L'vov, Izd-vo L'vovskogo univ., 1960. 258 p. (MIRA 14:9)

1. Chlen-korrespondent AN SSSR (for Karandeyev).  
(Electric motors, Induction)

S/196/62/000/011/008/009  
E194/E155

AUTHORS: Baskutis, P., Marazas, S., and Labudis, A.

TITLE: Use of the rotating field method to investigate shaded-pole motors

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.11, 1962, 20, abstract 11 II04. (Kauno politechn. inst. darbai, Tr. Kaunassk. politekhn. in-ta, v.14, no.5, 1961, 53-61).

TEXT: Shaded-pole motors have recently been constructed for outputs of 150 and 250 W. The rotating field method has been used to investigate processes in these motors; it allows their characteristics to be calculated fairly simply with allowance for the influence of higher harmonics of the magnetic field, and other problems can be studied. In a shaded-pole single-phase motor the shading coil sets up its own magnetic field which combines with the fields of the main winding. The resultant field in the air gap has a reverse component which is less than the forward component, so that starting torque develops. Tests were made on a motor of Card 1/2

Use of the rotating field method ... S/196/62/000/011/008/009  
E194/E155

constant air-gap with pole width equal to pole pitch. An analysis is given of the m.m.f. of the shading coils by resolving the m.m.f. curve into a Fourier series to obtain equations for each harmonic. It is concluded that the resultant m.m.f. in the air gap consists of two waves moving in opposite directions with different amplitudes. Formulae are given for the amplitude of the forward and reverse m.m.f. waves. For optimum operating conditions there should be the greatest possible difference between the forward and reverse waves. Optimum conditions require the location of the shading coil near the edge of the pole.

[Abstractor's note: Complete translation.]

Card 2/2

CZECHOSLOVAKIA/Cultivated Plants. Grains.

M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68149

Author : Basl, V., Antonov, A.  
Inst : -

Title : Data on Experiments with Dutch Pea Varieties (in Czechoslovakia).

Orig Pub : Za vysokou urodu, 1957, 5, No 19, 446-447

Abstract : No abstract.

Card : 1/1

40

BASKUTIS, P., prof., red.; YANITSKIS, I.[Janickis,I.], doktor khim. nauk, prof., red.; VIDMANTAS, Yu.[Vidmantas, J.], prof., stv. red.; STANAYTIS, I.[Stanaitis, I.], starshiy prepodavatel', red.; BRAYNIN, S., kand. istor. nauk, dots., red.; INDRYUNAS, I., [Indriunas, I.], doktor tekhn. nauk, prof., red.; LASINSKAS, M., kand. tekhn. nauk, red.; NOVODVORSKIS, A., kand. tekhn. nauk, dots., red.; PESIS, R.[Pesys, R.], kand. tekhn. nauk, dots., red.; SADAUSKAS, T., dots., red.; SHESHEL'GIS, K.[Seselgis, K.], kand. arkh. dots., red.; VASAUSKAS, S., kand. tekhn. nauk, dots., red.; ZDANIS, Yu. [Zdenis, J.], kand. tekhn. nauk, red.; GRIGALIUNAS, B. [Grigaliunas,B], red.; EYTUTIS, V.[Eitutis, V.], red.; VIDMANTAS, Yu.[Vidmantas,J.], red.; NAUYOKAS, I.. [Naujokas,I.], tekhn. red.

[Materials of the 5th Scientific Technical Conference of Students of Institutions of Higher Learning of the White Russian S.S.R., Latvian S.S.R., Lithuanian S.S.R. and Estonian S.S.R.] Trudy Nauchno-tekhnicheskoi konferentsii studentov vysshikh uchebnykh zavedenii Belorusskoi SSR, Latviiskoi SSR, Litovskoi SSR i Estoniakoi SSR, 5th. Kaunas, Izd. Kaunaskogo politekhn. in-ta, 1961. 205 p. (MIRA 14:12)

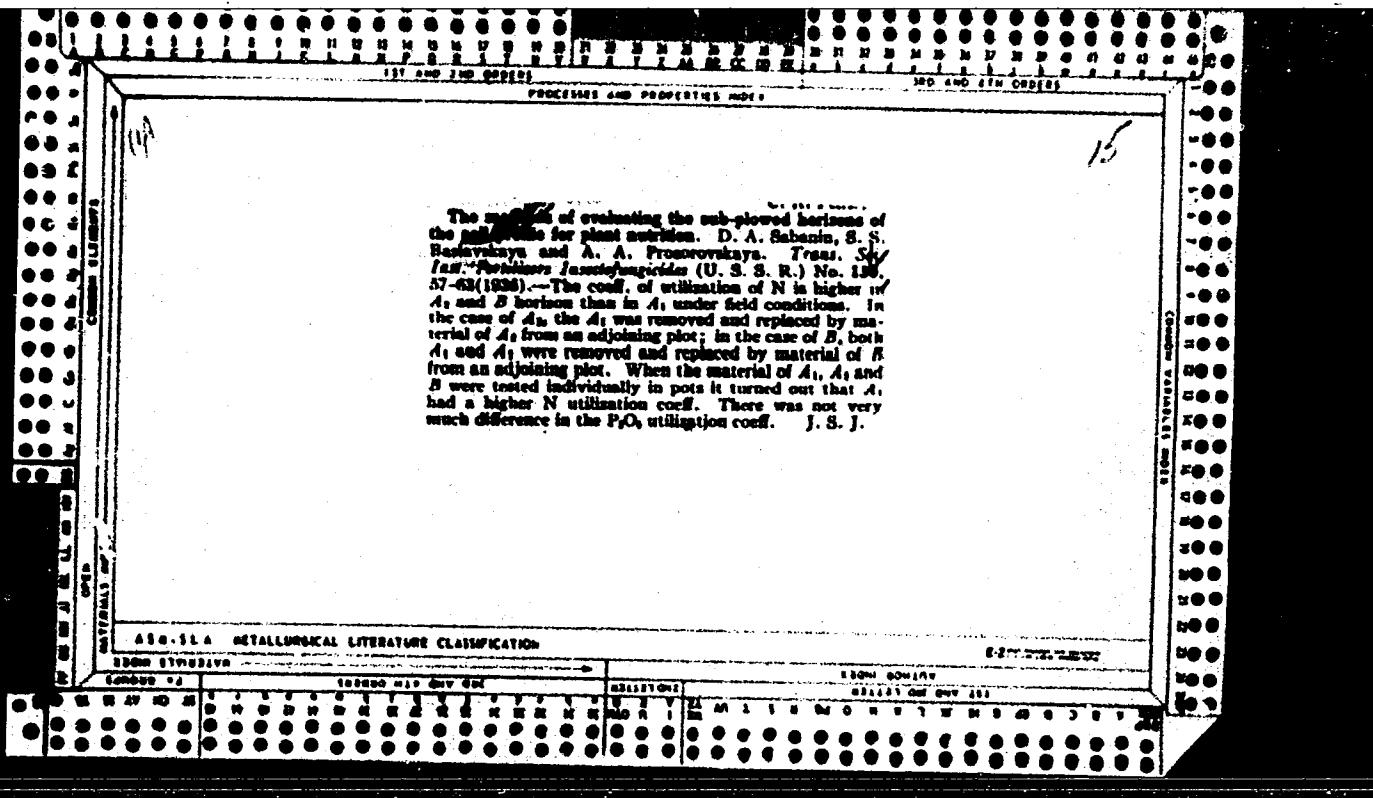
1. Nauchno-tekhnicheskaya konferentsiya studentov vysshikh uchebnykh zavedeniy Belorusskoy SSR, Latviyskoy SSR, Litovskoy SSR i Estoniakoy SSR, 5th.

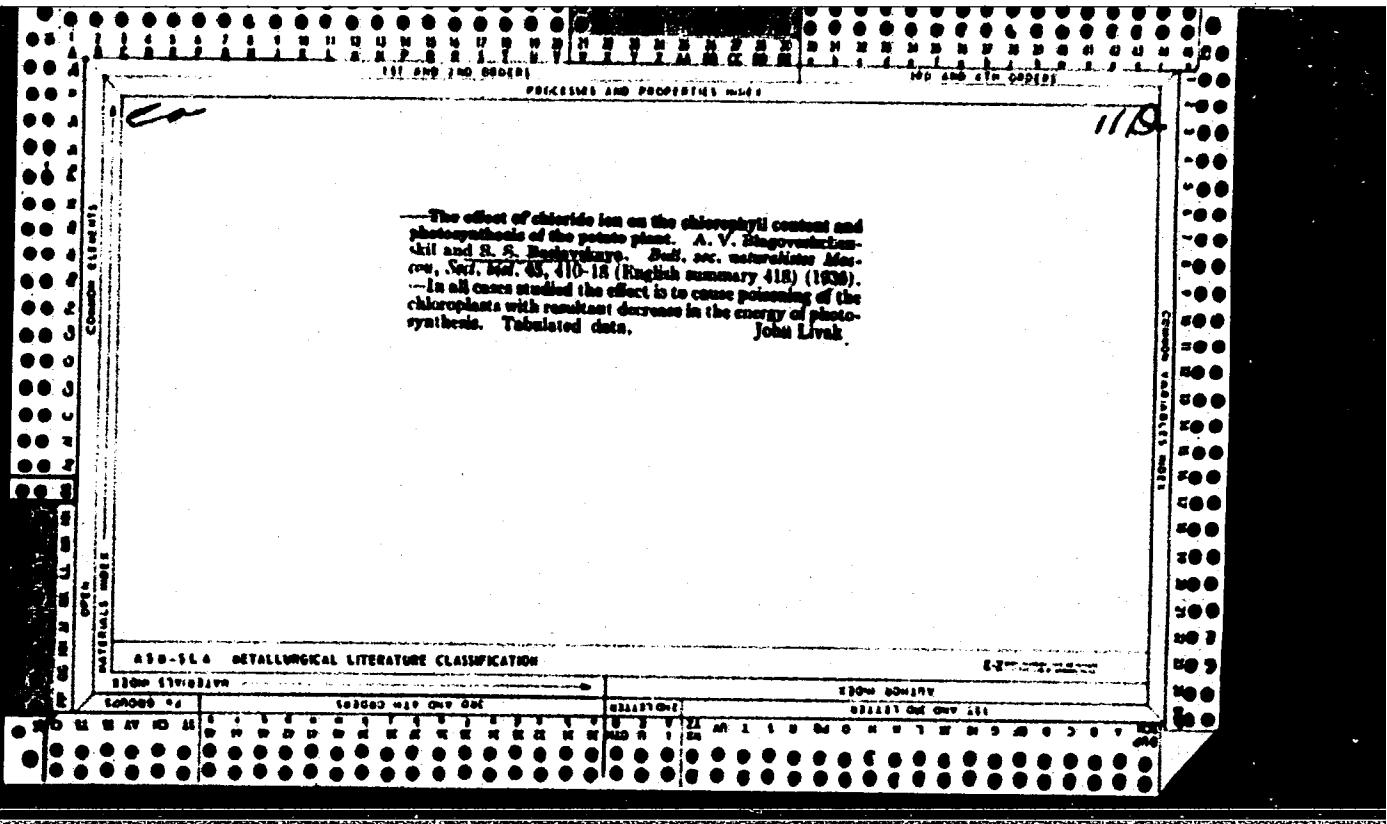
(Science--Congresses)

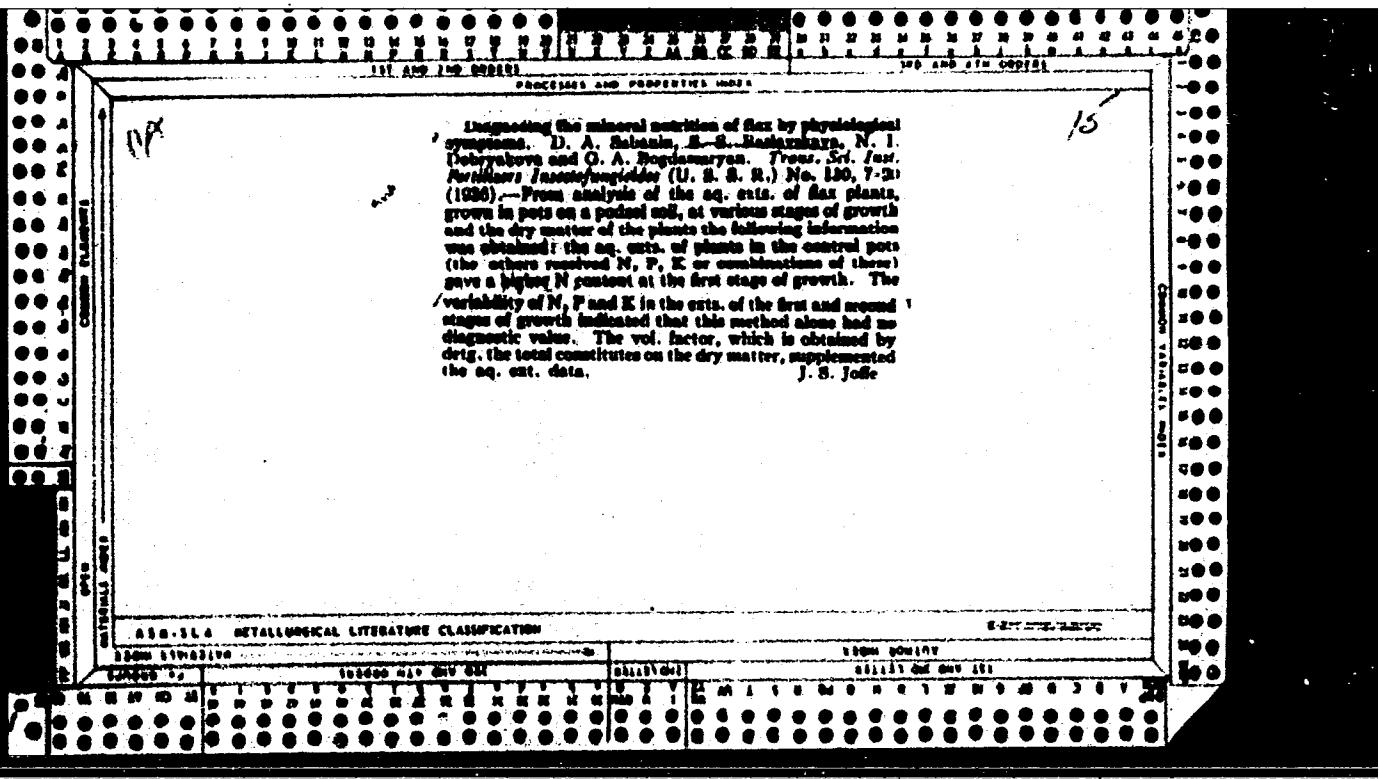
(Technology—Congresses)

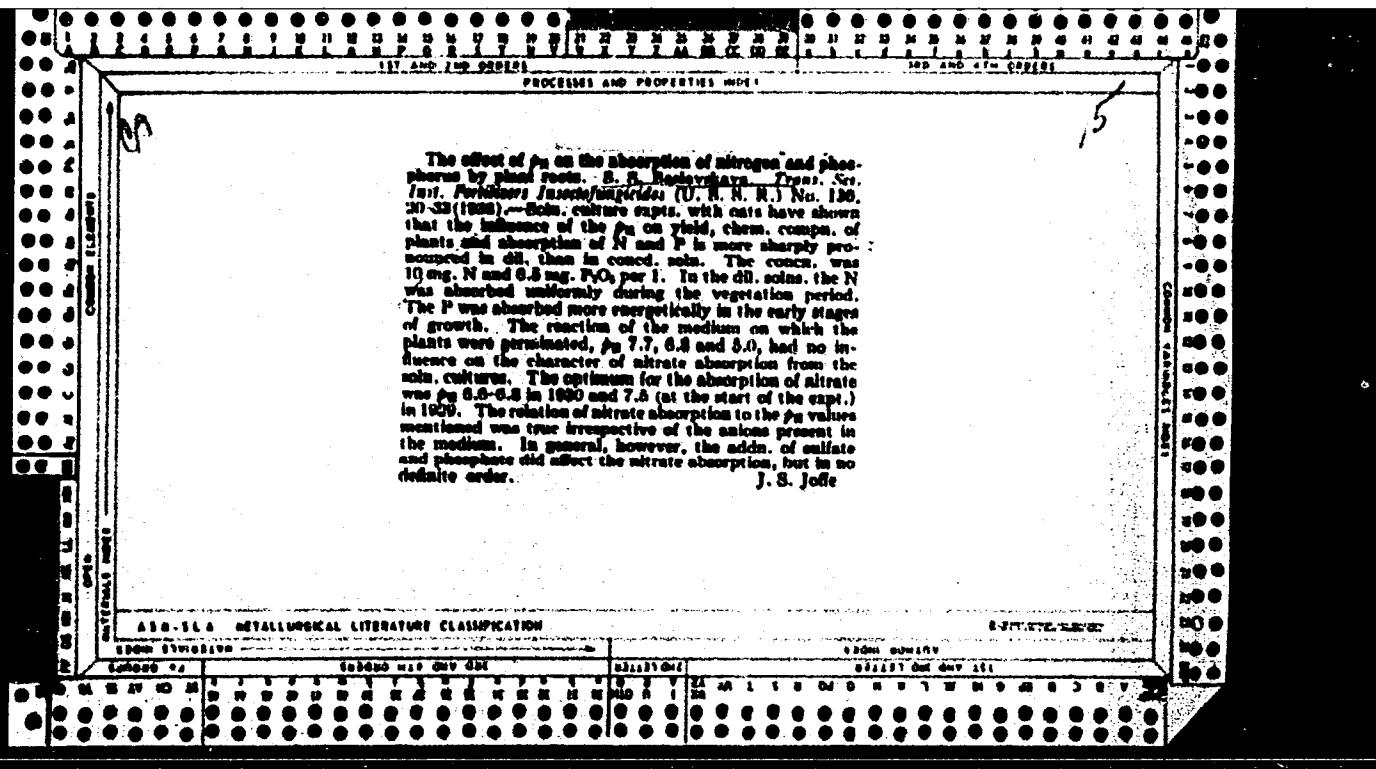
KAULAKIS, L.; DABUZINSKAS, K.; PUODZIUKYNAS, A.; GUDELIS, L.;  
BASKYS, V.; PETRULIS, K.; GREBLIKAS, P.; PETRUSEVICIUS, V.;  
BUTKUS, A., red.; BANCEVICIUS, P., tekhn. red.

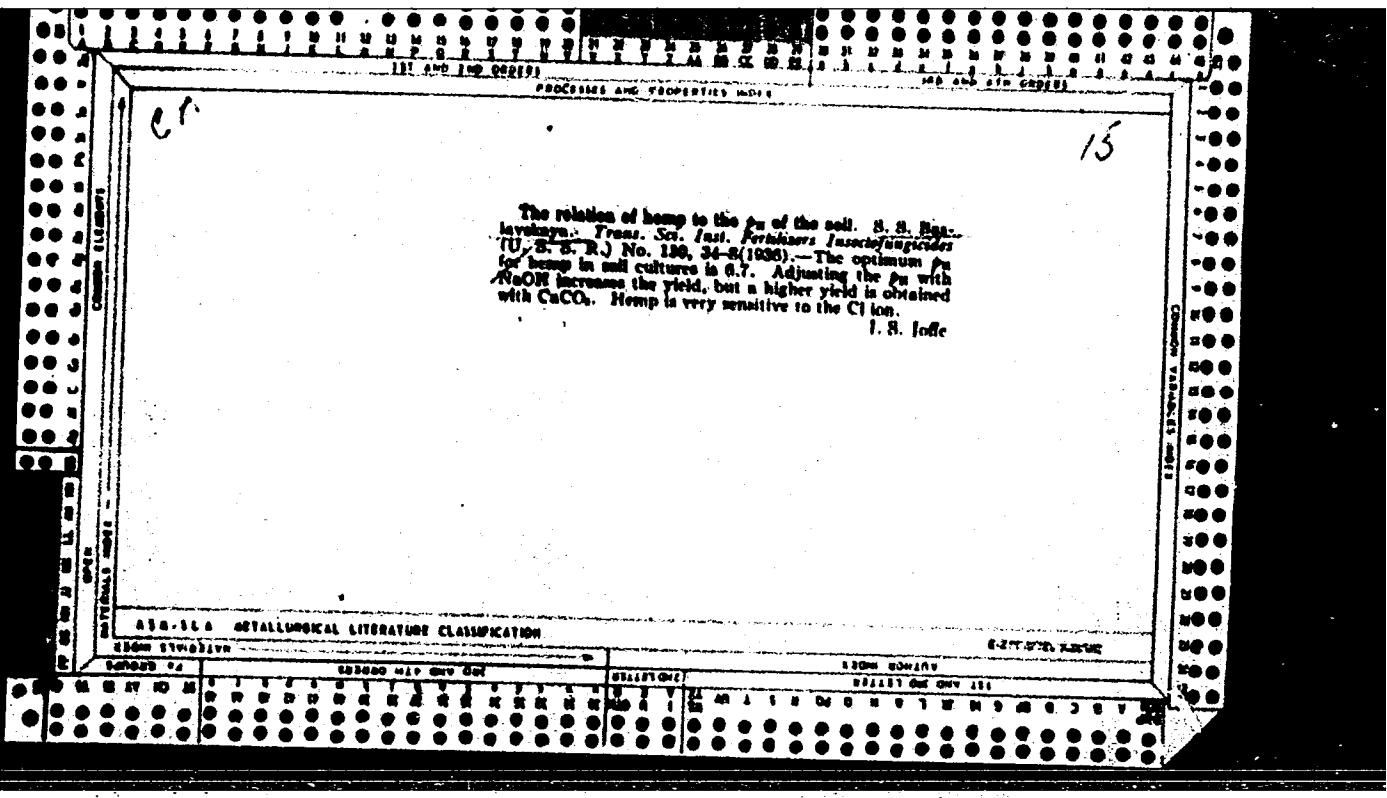
[Electrification of agriculture] Zemes ūkio elektrifikavimas.  
Vilnius, Valstybine politines ir mokslines literaturos leidykla,  
1961. 541 p. (MIRA 15:3)  
(Lithuania—Electricity in agriculture)









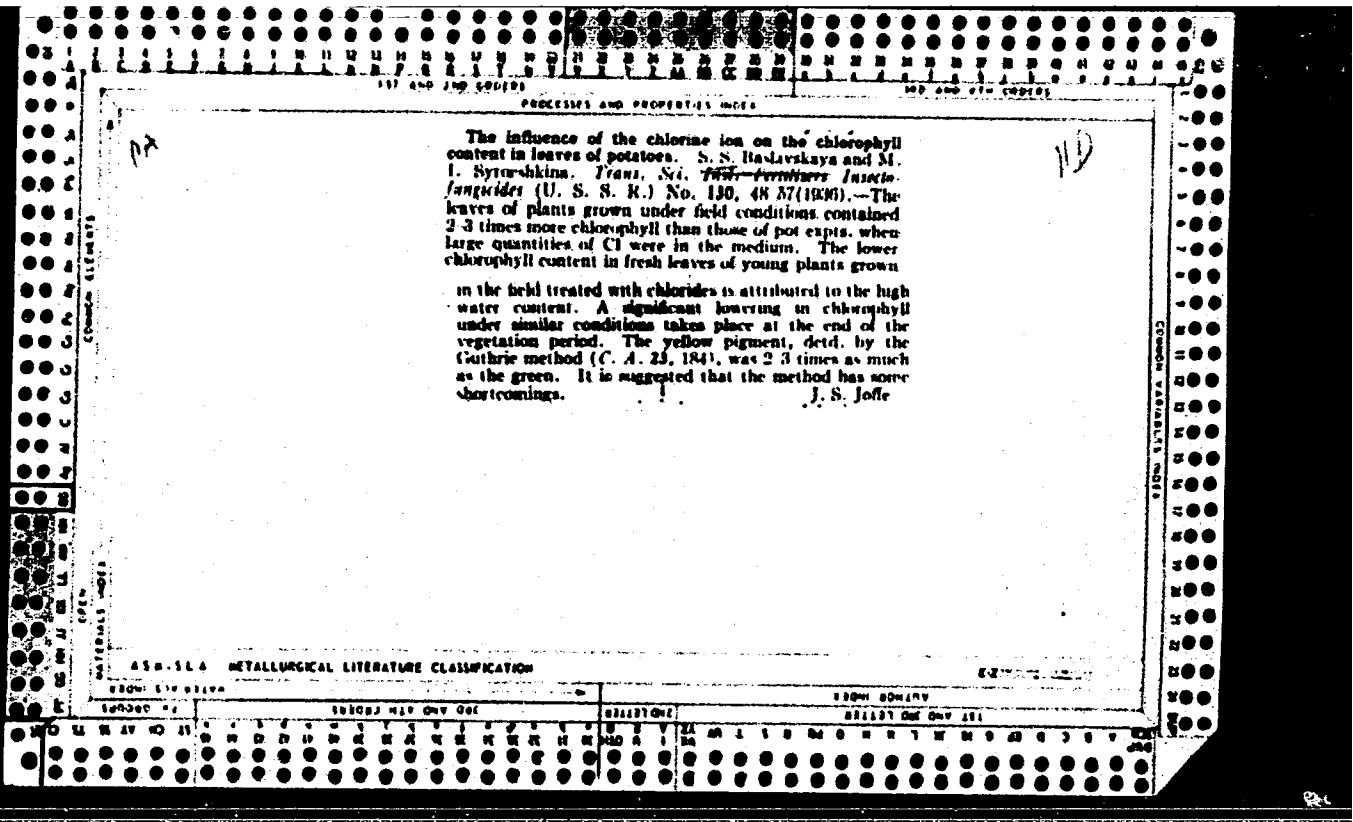


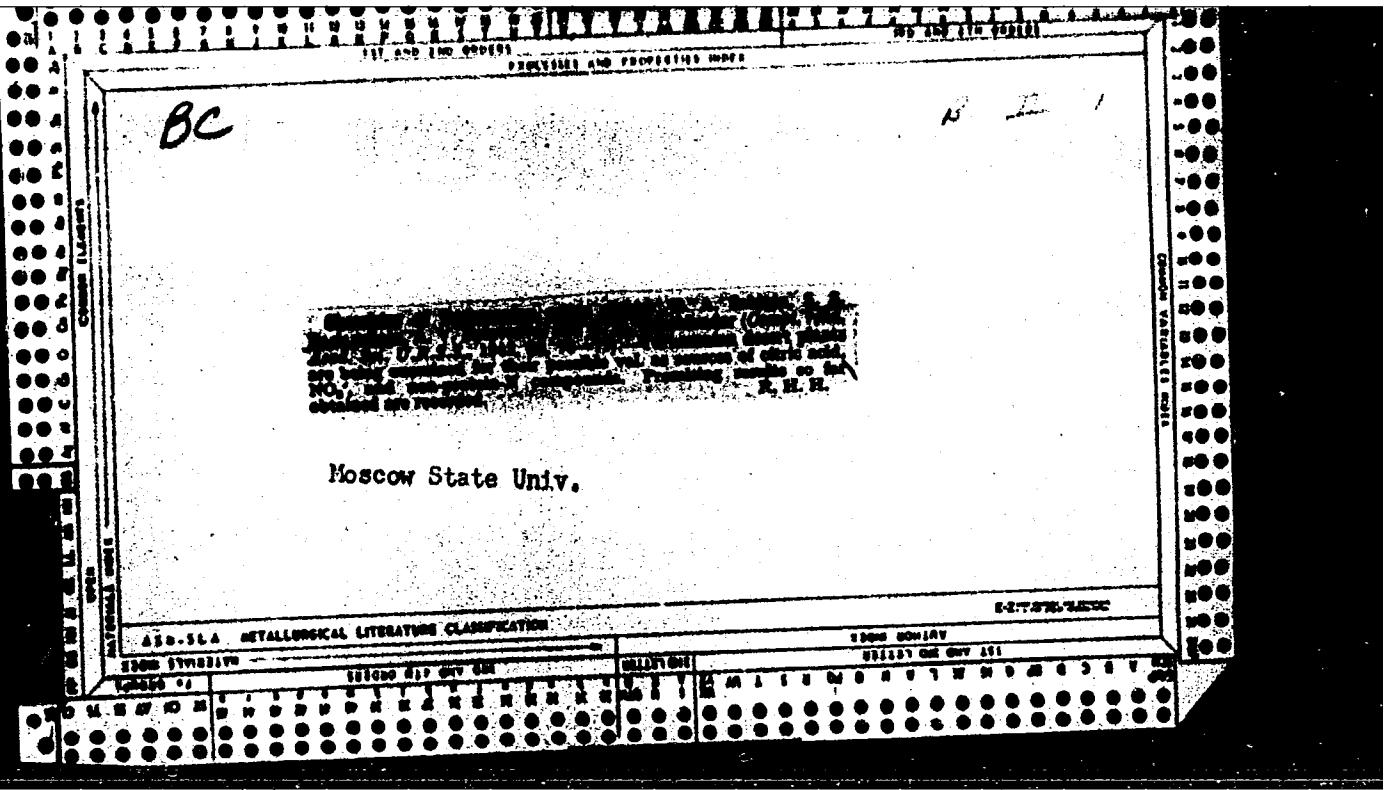
The intake and distribution of the chlorine ion in plants  
S. S. Basilevskaya. *Trans. Ser. Inst. Fertilizers* *Institute*  
*Engelskaya* [U. S. S. R.] No. 130, 28-35 (1931). Field  
exp. with potatoes, sand culture exps. with potatoes and  
flax, and soln. cultures with oats were used for this study.  
With the increase of Cl in the medium the Cl content of  
the potato plant as a whole and of the individual parts  
of leaves, stems—was increased. The lower portions of the  
leaves and stems of the potato proved to be very sensitive  
to the Cl ions. The movement of Cl from the lower portions  
of various parts of the plant to the upper portions  
took place at a late stage of vegetation. An acid medium  
favored the intake of Cl by oats. In soln. cultures the  
addn. of sulfate to an acid medium decreased the Cl intake.  
In an alk. medium the results were not definite. The  
intake of Cl and sulfate at pH 8.0 was more energetic when  
in soln. by themselves. Increased N in the medium de-  
creased the Cl intake by potatoes and flax. A decrease in  
N was noticed in flax with an increase in Cl in the medium.

T. S. Taffie

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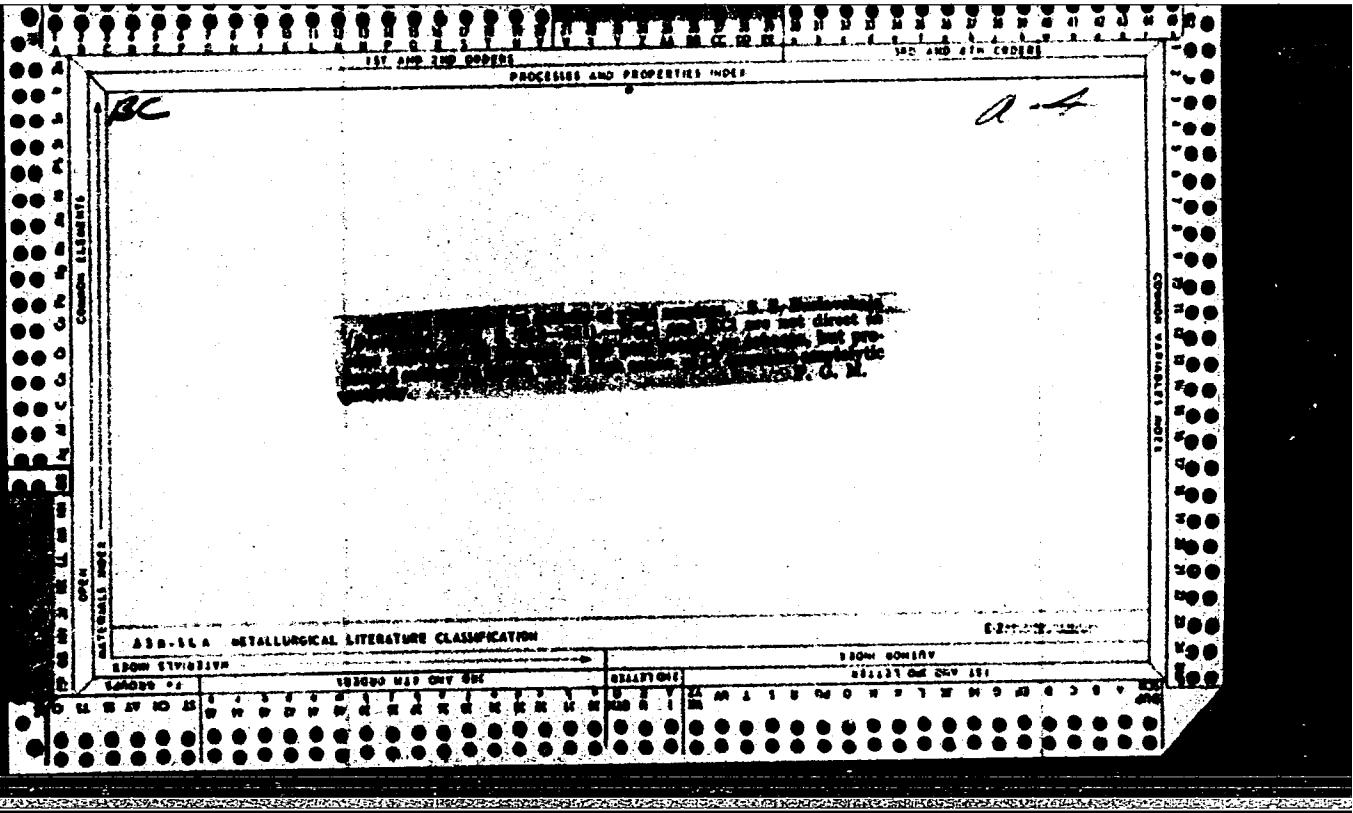
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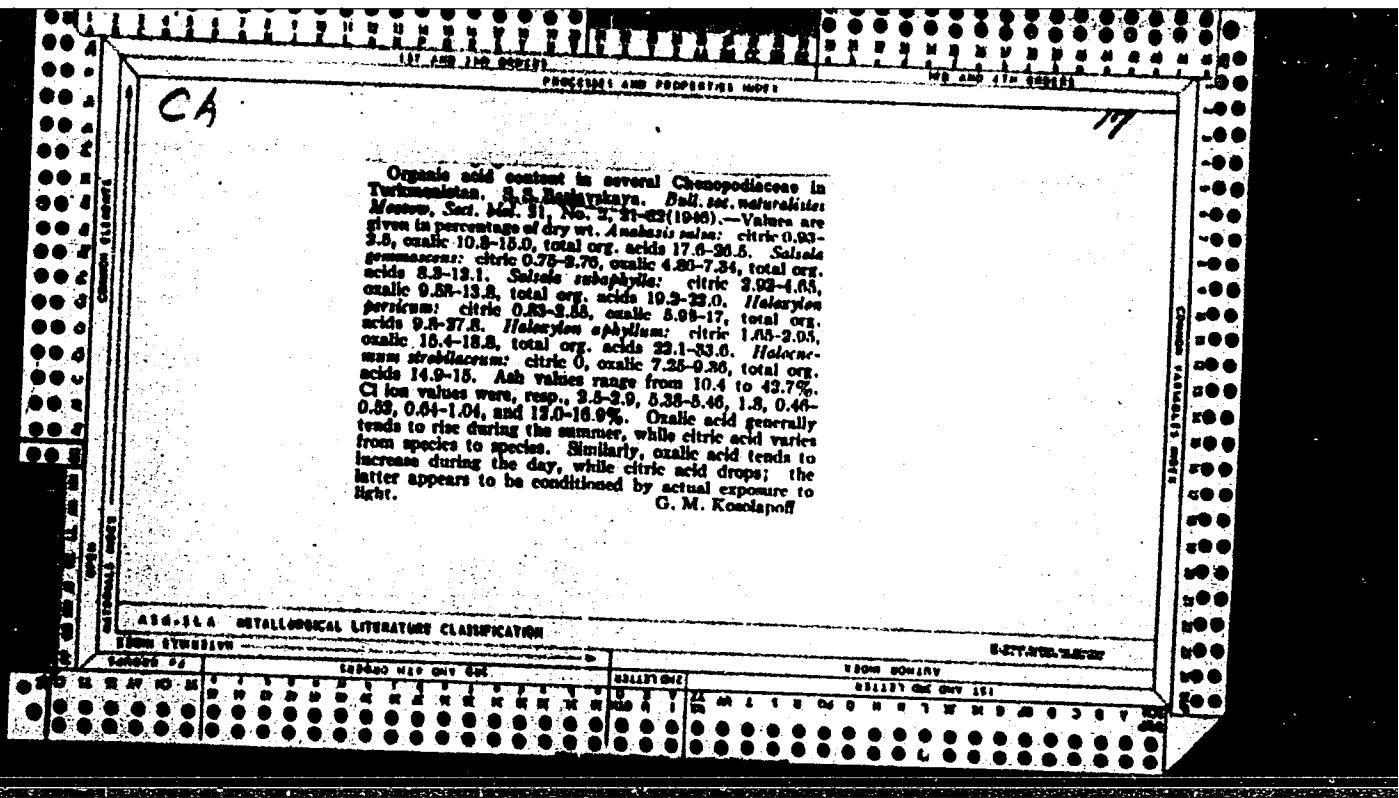
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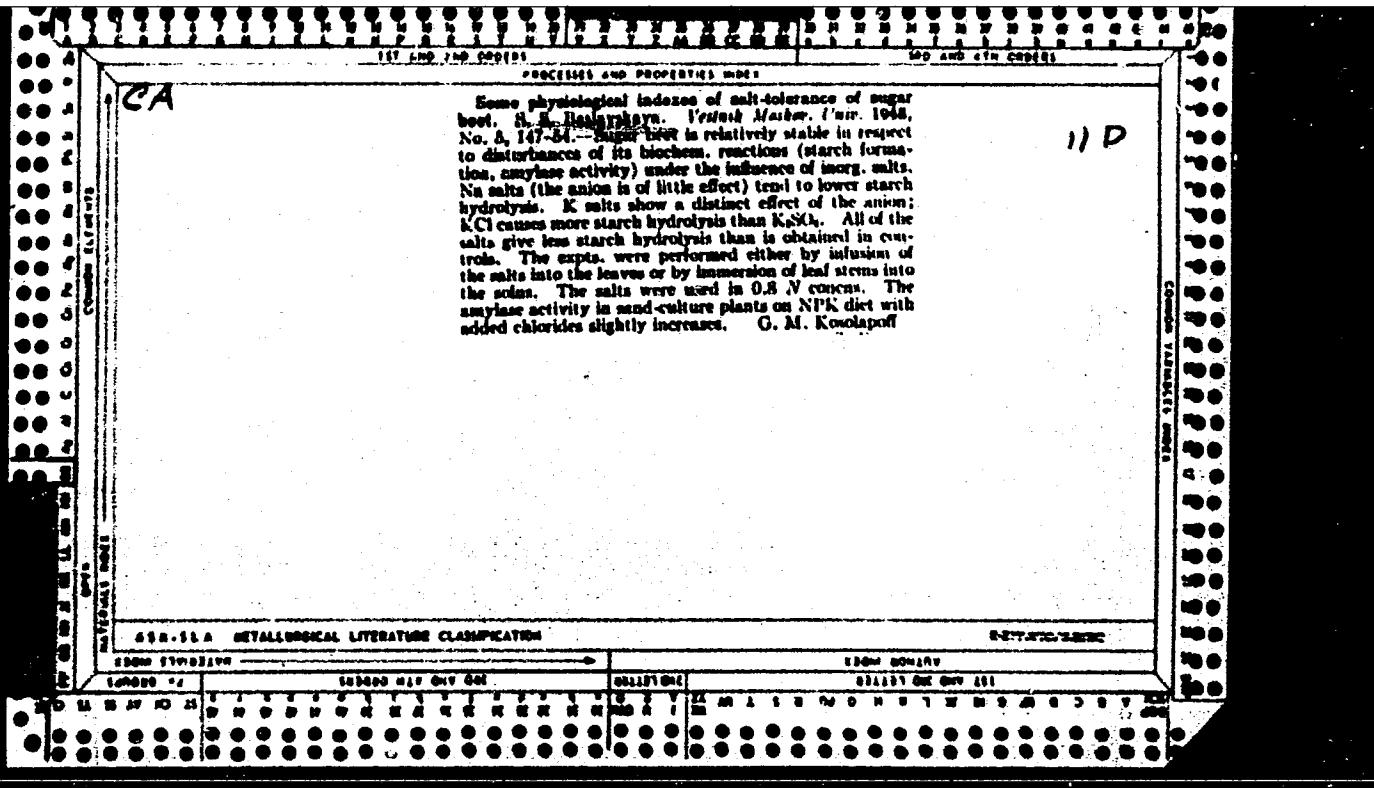
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CA

ND

The effect of potassium salts on photosynthesis of *Rhodospirillum* *canadense*. S. S. Radzinskaya and B. I. Zhuravleva. *Biotekhnika i zhivotnye*, No. 4, 421-6 (1948).—Exposures, long or short, of *R. canadense* to 20-100 mg./l. solns. of K salts (KCl, K<sub>2</sub>SO<sub>4</sub>) serve to increase sharply the photosynthetic activity. The sulfate is most active, giving up to 100% increase. The range of salt concn. giving the highest effect is 20-50 mg./l. The measurements were made by O<sub>2</sub> detn. in the test vessels. A few expts. with K<sub>2</sub>HPO<sub>4</sub> also gave pos. results. The long exposures were 4-8 days; the short ones—1-3 hrs. No significant differences between the different duration expts. could be detd.

G. M. Kosolapoff